CLAIMS

What is claimed is:

1. An infrared transmission and receiving system for an information stream transmission, the system comprising:

an environment;

an emitter unit mounted in an elevated position within the environment, the emitter unit having a plurality of LEDs connected to a circuit board, each of the LEDs having lead wires, each of the plurality of LEDs further having a selective angular direction for emitting infrared radiation media and at least two LEDs having different angular directions, at least one of the at least two LEDs having its pair of lead wires bent defining the LEDs angular direction; and

at least one receiver unit for receiving the infrared radiation media and translating the radiation media into discernable media.

2. The system of claim 1, wherein the environment is an indoor auditorium designed for the gathering of a plurality of people.

3. The system of claim 1, wherein the selective angular direction of the plurality of LEDs is achieved by bending a pair of bendable wire leads that connect each LED to the circuit board.

4. The system of claim 1, wherein the at least one receiver is used to translate the discernable media into audio for use by at least one of the plurality of people.

5. An emitter unit for an infrared transmission system, the emitter unit comprising:

an LED mounting board; and

an array of LEDs, each of the LEDs having

an infrared light emitting portion each light emitting portion having a selective angular direction of emission; and

a pair of bendable lead wires extending from the light emitting portion to the mounting board, at least one of the plurality of LEDs having the pair of lead wires selectively bent whereby the angular direction of emission of the light emitting portion is in an angular direction of emission different from that of at least one other of the plurality of LEDs.

6. The emitter unit of claim 5, wherein at least one of the plurality of LEDs have an angular direction of emission perpendicular to the surface of the circuit board.

7. The emitter unit of claim 5, wherein one of the plurality of LEDs is on a right side of the circuit board and the pair of lead wires of said LED is bent pointing said LED in a leftwardly direction and wherein one of the plurality of LEDs is on a left side of the circuit board and the lead wires of said LED are bent pointing said LED in a rightwardly direction.

8. The emitter unit of claim 5, wherein each pair of lead wires have an alignment direction and wherein at least two of the alignment directions of 2 LEDs are different.

9. The emitter unit of claim 5, wherein at least two of the plurality of LEDs have different angles from the vertical from one another from a perspective of directly in front of the board.

10. The emitter unit of claim 5, wherein at least 2 of the LEDs have different angles from the mounting board from one another.

11. The emitter unit of claim 5, wherein each of the pairs of bendable lead wires have an easy bend axis and where at least two of the easy bend axis are not parallel.

12. The emitter unit of claim 5, wherein the different angular directions of the plurality of LEDs is manually adjustable by an end user.

13. The emitter unit of claim 5, wherein a bending means is used for bending the wire leads to adjust the different angular directions of a selected group of the plurality of LEDS.

14. An infrared transmission and receiving system for an information stream transmission, the system comprising:

an environment;

an emitter unit mounted in an elevated position within the environment, the emitter unit having an array of LEDs connected to a circuit board, each of the LEDs having lead wires, each of the plurality of LEDs further having a selective angular direction for emitting infrared radiation media and at least two LEDs having different angular directions, at least one of the LEDs having its pair of lead wires bent defining the LEDs angular direction;

at least one receiver unit for receiving the infrared radiation media and translating the radiation media into at least one of the set of analog and digital media; and

a bending means for bending lead wires which connect the plurality of LEDs to the circuit board.

15. A method of configuring an infrared emitter unit for use in transmitting an infrared signal to a selectable transmission coverage area for receipt by an infrared receiving unit within said coverage area, comprising the steps of:

connecting a plurality of LEDs to an emitter circuit board, with each of the plurality of LEDs having a light emitting portion and at least two lead wires connecting the emitting portion and the circuit board; and

selectively bending the at least two lead wires of at least one of the plurality of LEDs such that an angular emitting direction is defined for the transmission of an infrared radiation media.

16. A method for an end user to configure an infrared emitter unit in an environment for use in transmitting an infrared signal to a selectable transmission coverage area in said environment for receipt by an infrared receiving unit within said coverage area, comprising the steps of:

observing the configuration of the environment;

selecting a desired configuration for the transmission coverage area;

gaining access to the LEDs of the emitter unit, with each of the plurality of LEDs having a light emitting portion and at least one lead wire intermediately connecting the emitting portion to a circuit board; and

selectively bending the at least one lead wire of at least one of the plurality of LEDs with bending means such that an angular emitting direction is adjusted for the transmission of an

infrared radiation media whereby the desired configuration for the transmission coverage area is obtained.

17. A method for an end user to configure an infrared emitter unit in an environment for use in transmitting an infrared signal to a selectable transmission coverage area in said environment for receipt by an infrared receiving unit within said coverage area, comprising the steps of:

accessing the LEDs of the emitter unit, with each of the plurality of LEDs having a light emitting portion and a pair of lead wires intermediately connecting the emitting portion to a mounting board; and

receiving infrared signal information from an infrared signal detection unit within the environment for providing information on the infrared signal boundaries of the transmission coverage area;

selectively bending the at least one lead wire of at least one of the plurality of LEDs with bending means to adjust the size and shape of the transmission coverage area based on the information from the infrared signal detection unit.

18. The method of claim 17, further comprising the step of selecting an infrared signal detection unit for the infrared receiving unit.

19. The method of claim 17, further comprising the step of selecting an infrared signal detection unit for detecting signal direction and strength.

20. An infrared emitter unit comprising:

a housing enclosing a mounting board, the mounting board having a front face with a plurality of LEDs extending therefrom, each LED having at least two lead wires extending from the mounting board, each LED having a projection area with a central aiming axis, the projection areas of the plurality of LEDs defining a coverage area of the emitter unit, the coverage area adjustable by moving the projection areas and central aiming axis of individual LEDs by bending the at least two lead wires of the individual LEDs, at least one of the plurality of LEDs having it's lease wires bent whereby said LED has it's central aiming axis in a direction at least 10° from the central aiming axis of another of the plurality of LEDs.

21. An infrared emitter unit comprising:

a housing enclosing a mounting board, the mounting board having a front face with a plurality of LEDs extending therefrom, each LED having two lead wires extending from the mounting board, each of the two lead wires having an alignment direction, each LED having a projection area with a central aiming axis, the projection areas of the plurality of LEDs defining a coverage area of the emitter unit, the coverage area adjustable by moving the projection areas and central aiming axis at least two of the LED's drawing different alignment directions for their respective two lead wires.